

AMENDMENTS TO THE CLAIMS

1. (previously presented): A method for determining cyclase inhibiting parathyroid hormone (CIP) in a sample comprising:

a) adding to the sample a labeled antibody or antibody fragment specific for a peptide sequence for CIP that presents an epitope accessible for antibody binding in CIP, but which epitope is inaccessible for antibody binding in cyclase activating parathyroid hormone, in an amount sufficient to bind the CIP present, wherein the CIP comprises a contiguous portion of PTH, the PTH having an amino acid sequence set forth in SEQ ID NO:3, and the CIP having an N-terminal amino acid residue starting at position 7 of the PTH and a C-terminal amino acid residue ending at position 84 of the PTH;

b) allowing the labeled antibody to bind to any CIP present, thereby forming a complex; and

c) measuring the amount of labeled complex.

2. (original): The method of Claim 1 wherein the labeled CIP antibody or antibody fragment is one of the following, a monoclonal antibody and a polyclonal antibody.

3. (previously presented): The method of claim 1 wherein a second antibody is added which is bound to a solid support and specifically binds to a portion of CIP other than that bound by the labeled antibody, thereby forming a complex.

4. (previously presented): The method of Claim 3 wherein the solid support is selected from the group consisting of colloidal metal particles, iron oxide particles, latex particles, and polymeric beads.

5. (previously presented): The method of Claim 1, wherein a second antibody that specifically binds to a portion of CIP other than that bound by the labeled antibody is added and is allowed to bind to any CIP present that is bound to labeled antibody, wherein the resultant complex precipitates from solution.

6. (previously presented): The method of Claim 1 wherein the label is selected from the group consisting of a chemiluminescent agent, a colorimetric agent, an energy transfer agent, an enzyme, a fluorescent agent, and a radioisotope.

7. (previously presented): A method for measuring the amount of cyclase inhibiting parathyroid hormone (CIP) fragment in a sample comprising:

- a) adding to the sample a first antibody or antibody fragment in an amount sufficient to bind the CIP present, wherein the first antibody or antibody fragment is specific for a peptide sequence for CIP that presents an epitope accessible for antibody binding in CIP, but which epitope is inaccessible for antibody binding in cyclase activating parathyroid hormone, wherein the CIP comprises a contiguous portion of PTH, the PTH having an amino acid sequence set forth in SEQ ID NO:3, and the CIP having an N-terminal amino acid residue starting at position 7 of the PTH and a C-terminal amino acid residue ending at position 84 of the PTH₄;
- b) allowing the first antibody to bind to any CIP present, thereby forming a first complex;
- c) adding a second antibody that specifically binds to a portion of CIP other than the peptide sequence which binds to the first antibody and allowing the second antibody to bind to the first complex thereby forming a second complex, wherein the first antibody or the second antibody has a label or signal generating component attached thereto; and
- d) determining the presence, absence or amount of the second complex.

8. (previously presented): The method of Claim 7 wherein the second antibody is added sequentially or simultaneously with the first antibody.

9. (original): The method of Claim 7 wherein the first antibody is bound to a solid support.

10.-16. (canceled)

17. (previously presented): A kit for performing an assay for cyclase inhibiting parathyroid hormone (CIP), the kit comprising:

a) a first antibody or antibody fragment specific for a peptide sequence for CIP that presents an epitope accessible for antibody binding in CIP, but which epitope is inaccessible for antibody binding in cyclase activating parathyroid hormone, wherein the CIP comprises a contiguous portion of PTH, the PTH having an amino acid sequence set forth in SEQ ID NO:3, and the CIP having an N-terminal amino acid residue starting at position 7 of the PTH and a C-terminal amino acid residue ending at position 84 of the PTH; and

b) a second antibody that specifically binds to a portion of CIP other than the peptide sequence which binds to the first antibody, which is bound to a solid support.

18. (previously presented): The kit of Claim 17 further comprising an antibody specific for the C-terminal portion of CIP.

19. (previously presented): The method of Claim 7 wherein the second antibody is bound to a solid support, and wherein the solid support is selected from the group consisting of a colloidal metal particle, an iron oxide particle, a latex particle, and a polymeric bead.

20. (previously presented): The method of Claim 7 wherein the labeled complex precipitates from solution.

21. (previously presented): The method of Claim 7 wherein the label or signal generating component is selected from the group consisting of a chemiluminescent agent, a colorimetric agent, an energy transfer agent, an enzyme, a fluorescent agent, and a radioisotope.

22. (previously presented): The method of claim 7, wherein the label or signal generating component is attached to the first antibody.

23. (previously presented): The method of claim 7, wherein the label or signal generating component is attached to the second antibody.

24. (previously presented): The method of Claim 7 wherein the first antibody or antibody fragment is either of the following, a monoclonal antibody or a polyclonal antibody.

25. (previously presented): The method of Claim 7 wherein the second antibody or antibody fragment is either of the following, a monoclonal antibody or a polyclonal antibody.